

Office Action Summary	Application No.	Applicant(s)
	10/578,698	SOURLIER, DAVID
	Examiner	Art Unit
	KELLY L. JERABEK	2622

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 04 October 2010.

2a) This action is **FINAL**. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 25-33 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 25-33 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on 09 May 2006 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
 3) Information Disclosure Statement(s) (PTO/SB/08)
 Paper No(s)/Mail Date _____

4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____.
 5) Notice of Informal Patent Application
 6) Other: _____

DETAILED ACTION

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Edwin Schindler on 12/20/2010.

Please cancel original claims 20-24.

Please renumber new claims 20-28 as claims 25-33 respectively.

Response to Arguments

Applicant's arguments with respect to new claims 25-33 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 25-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kinoshita et al. US 5,757,949 in view of Nakayama US 6,768,813.

Re claim 25, Kinoshita discloses a method for evaluating travel and traffic situations with at least two temporally-synchronized and calibrated detection cameras (2 CCD cameras 25) arranged at a definite distance to one another on a first vehicle (1) in a surrounding, by which a coordinate system pertaining to said first vehicle (1) is defined, with detection regions of said detection cameras (25) over-lapping in a common overlapping region in the surrounding (figure 2; col. 3, line 58-col. 4, line 9), comprising the steps of: providing, with a common time control, a triangulated, position-calibrated, synchronized picture recording using said detection cameras (25) (a 3D picture is produced using the cameras) (col. 3, line 58-col. 4, line 9) ; selecting at least one naturally present reference point in the surrounding (objects lying ahead of vehicle), for permitting any selected reference point to be detected in its actual, time-depending spatial position with the coordinate system of the first vehicle (1) (col. 3, line 58-col. 4, line 9); and upon considering location of a position and orientation of said detection cameras (25) in said coordinate system of said first vehicle (1), either: the temporal and spatial location and position of any movement of said first vehicle of the surrounding, or in the coordinate of the first vehicle are being determined by triangulated calculations in real time (col. 3, line 58-col. 4, line 9). However, although the Kinoshita reference discloses all of the above limitations it only discloses a triangulation method and does

not specifically disclose that photogrammetrical calculations may be performed in order to evaluate travel and traffic situations.

Nakayama discloses a photogrammetric image processing apparatus for photogrammetrically generating images from images captured by multiple cameras. The Nakayama reference specifically states that it is well known in the art for photogrammetry to be used in making maps and recording locations conditions such as traffic accidents (col. 1, lines 10-28). Therefore, it would have been obvious for one skilled in the art to have been motivated to photogrammetrically generate images in the travel and traffic monitoring system disclosed by the Kinoshita reference. Doing so would provide a means for effectively reconstructing a moving scene in a traffic situation so that the accident can be analyzed at a later time.

Re claim 26, the Kinoshita reference further discloses that the temporal and spatial location and position of any movement of the first vehicle (1) in the coordinate system of the surrounding, a calculation of the actual time-dependent position of the reference points of the detection cameras in the coordinate system of the surrounding and the coordinate system of the first vehicle (1) is effected via a computer (image recording unit 26) (col. 3, line 58-col. 4, line 9). In addition, the Nakayama reference discloses that movement data of vehicles in a traffic accident situation may be calculated photogrammetrically (col. 1, lines 10-28).

Re claim 27, the Kinoshita reference further discloses that in the temporal and spatial location and position of any movement of the first vehicle (1) in the coordinate system of the surrounding, the calculated position and movements of the vehicle (1) via recorded, calibrated and triangulable pictures of the surroundings and the reference points (3D picture produced using triangulation) are assignable to the triangulable pictures of the surroundings and comtemporarily to the surroundings and the coordinate system with a picture of the surrounding additionally calculated and superimposed (triangulation is used to produce a distance picture of the vehicle's surroundings show a three-dimensional distance distribution) (col. 3, line 58-col. 4, line 9).

Claims 28-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kinoshita et al. US 5,757,949 in view of Nakayama US 6,768,813 and further in view of Ohashi et al. US 5,910,817.

Re claim 28, Kinoshita discloses an installation for recording travel and traffic situations of vehicles, comprising two temporally-synchronized and calibrated detection cameras (2 CCD cameras 25) arranged at a definite distance to one another on a first vehicle (1) in a surrounding, by which a coordinate system pertaining to said first vehicle (1) is defined, with detection regions of said detection cameras (25) over-lapping in a common overlapping region in the surrounding (figure 2; col. 3, line 58-col. 4, line 9), said detection cameras (25) being connected with a time control, so that a picture recording is temporally synchronizable and spatial location and position of the two

detection cameras (25) in the coordinate system of the first vehicle (1) is calibrated (col. 3, line 58-col. 4, line 9), so that in relation to the position of the two detection cameras (25), calibrated triangulated pictures are recordable, and at least one selected natural reference point (objects lying ahead of the vehicle) in the surrounding is calculable, thereby permitting the reference points to be recordable in their time-dependent positions, so that based on a performed time control, synchronized picture recording, an actual time-dependent position of the reference points in the surrounding and an absolute position of the two detection cameras (25) in the coordinate system of the first vehicle (1), the time-dependent position and the movements of the first vehicle (1) in the coordinate system of the surrounding is determinable by triangulation calculations (col. 3, line 58-col. 4, line 9). It is noted that the Kinoshita reference fails to specifically state that detection cameras (25) include microphones for recording sound. However, the examiner takes **official notice** that it is well known in the art for monitoring cameras to include microphones in order to capture sound in addition to video. Although the Kinoshita reference discloses all of the above limitations it only discloses a triangulation method and does not specifically disclose that photogrammetrical calculations may be performed in order to evaluate travel and traffic situations.

Nakayama discloses a photogrammetric image processing apparatus for photogrammetrically generating images from images captured by multiple cameras. The Nakayama reference specifically states that it is well known in the art for photogrammetry to be used in making maps and recording locations conditions such as traffic accidents (col. 1, lines 10-28). Therefore, it would have been obvious for one

skilled in the art to have been motivated to photogrammetrically generate images in the travel and traffic monitoring system disclosed by the Kinoshita reference. Doing so would provide a means for effectively reconstructing a moving scene in a traffic situation so that the accident can be analyzed at a later time. However, although the combination of the Kinoshita and Nakayama references disclose all of the above limitations they fail to specifically disclose that the installation further includes a database containing data of vehicle shapes of a multitude of vehicle types, so that the vehicle shapes are able to be linked to the selected reference points defining location of additional vehicles.

Ohashi discloses an object observing method and device. The Ohashi reference specifically discloses that it is well known in the art for camera vehicle detection systems to include camera model data storage databases that contain vehicle shapes for different types of vehicles so that vehicle shapes are able to be linked to reference points defining the location of vehicles (col. 18, lines 54-67; figures 43A, 43B). Therefore, it would have been obvious for one skilled in the art to have been motivated to include a model data database as disclosed by the Ohashi reference in the travel and traffic monitoring system disclosed by the combination of the Kinoshita and Nakayama references. Doing so would provide a means detecting the locations of different models of vehicles by referencing a database of vehicle shapes.

Re claim 29, the Kinoshita reference further discloses that that installation includes at least one memory element (image recognizing unit 26) coupled to the two

detection cameras (25) for serial storage of a picture sequence (image recognizing unit 26 processes and stores image signals output from CCD cameras 25) (col. 3, lines 58-67; col. 4, lines 56-60).

Re claim 30, the Kinoshita reference further discloses that the installation includes a non-volatile memory (image recognizing unit 26) for storing a spatial camera arrangement in the coordinate system of the first vehicle (1) (a 3D distance picture is produced of the scene) (col. 3, line 58-col. 4, line 9). It is noted that the Kinoshita reference fails to specifically state that the serial storage is a circular buffer. However, the examiner takes **official notice** that it is well known in the art for video monitoring systems to include first-in-first-out buffers that overwrite the oldest recorded video when a buffer is full in order to reduce memory consumption. Therefore, it would have been obvious for one skilled in the art to have been motivated include a FIFO buffer in the installation disclosed by the Kinoshita, Nakayama, and Ohashi references.

Claims 31-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kinoshita et al. US 5,757,949 in view of Nakayama US 6,768,813 in view of Ohashi et al. US 5,910,817 and further in view of Kaylor et al. US 6,961,079.

Re claims 31-32, the combination of the Kinoshita, Nakayama, and Ohashi references discloses all of the limitations of claim 23 above. However, the combination does not specifically disclose that the two detection cameras (25) are connected to a

time control for the purpose of rendering an absolute time for respective picture recording determination.

Kaylor discloses a portable traffic surveillance system. The Kaylor reference specifically states that it is well known in the art for traffic surveillance systems to include a time and date stamp generator (27) for recording a time and date together with captured video images (col. 4, lines 1-20). Therefore, it would have been obvious for one skilled in the art to have been motivated to include a time and date stamp generator as disclosed by the Kaylor reference in the travel and traffic monitoring system disclosed by the combination of the Kinoshita, Nakayama and Ohashi references. Doing so would provide a means for effectively reconstructing a moving scene in a traffic situation by recording video images together with recording time so that the accident can be analyzed at a later time.

Re claim 33, the combination of the Kinoshita, Nakayama, and Ohashi references discloses all of the limitations of claim 23 above. However, the combination does not specifically disclose that the installation includes a sensor for an automatic activation.

Kaylor discloses a portable traffic surveillance system. The Kaylor reference specifically states that it is well known in the art for traffic surveillance systems to include a sensor that automatically activates a detection camera in order to detect an event (col. 6, lines 38-45). Therefore, it would have been obvious for one skilled in the art to have been motivated to include a sensor that automatically activates a detection

camera in order to detect an event as disclosed by the Kaylor reference in the travel and traffic monitoring system disclosed by the combination of the Kinoshita, Nakayama and Ohashi references. Doing so would provide a means for automatically detecting a moving scene in a traffic situation by recording video images.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Contacts

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kelly L. Jerabek whose telephone number is **(571) 272-7312**. The examiner can normally be reached on Monday - Friday (8:00 AM - 5:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan can be reached at **(571) 272-3022**. The fax phone number for submitting all Official communications is **(571) 273-7300**. The fax phone number for submitting informal communications such as drafts, proposed amendments, etc., may be faxed directly to the Examiner at **(571) 273-7312**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Kelly L. Jerabek/

Primary Examiner, Art Unit 2622